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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/475,614 | 12/30/1999 | Gilbert Wolrich | 10559/137001/P7876 | 6580 |

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EXAMINER

ENG, DAVID Y

| ART UNIT | PAPER NUMBER |
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2155

DATE MAILED: 05/07/2004

18

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/475,614

Applicant(s)

WOLRICH ET AL.

Examiner

DAVID Y. ENG

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) 26-43 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-43 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

In line 16 of page 7 of the specification, "Fig. 3" should be --Fig. 2--.

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-25, drawn to a method for receiving data from a network, classified in class 709, subclass 232.
- II. Claims 26-43, drawn to a system having a set of independent programmable micro-engines for executing threads, classified in class 718, subclass 37.

The inventions are distinct, each from the other because:

Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the receiving of data from a network as recited in Group I does not require a processing system having independent programmable micro-engines, receive scheduler program thread and receive processing program thread. The subcombination has separate utility such as execute other network program.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Claims 26-43 directed to an invention that is independent or distinct from the invention originally claimed for the above reasons. Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits.

Accordingly, claims 26-43 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allison (USP 6,373,848) in view of Belkin (USP 6,604,125).

With respect to claims 1, 3, 17 and 18, see at least the abstract Figures 1 and 9 and the description in the specification of Allison. Allison teaches a method of receiving data from a network (lines 12-13, col.11), comprising:

Issuing a request (see Figure 9 and the description in col.11) directing a transfer of data from one of a plurality of device ports (ports 1-n in Figure 1) to a storage unit (see registers or FIFO) and specifying (instruction program counter) a thread (instructions, see line 57, col. 2) to process (control logic 34) the data.

Allison teaches that each FIFO provides instructions (thread) to control logic for controlling transmitting and receiving data between the host system and the network. Allison does not teach plurality of threads. However, Belkin teaches a server for receiving data from a network (see Figure 1). The server has a storage for storing a pool of threads and a thread selector. In response to a request, a specific thread from a

plurality of threads is selected to process the task requested by the request. Since both references are directed to transceiving data between a host and a network, it would have been obvious to a person of ordinary skill in the art to provide a pool of threads as taught by Belkin in Allison so that specific tasks such as transmitting or receiving can be respectively controlled by specific threads.

With respect to the dependent claims, interlock signals for controlling the transfer of data from one device to another are well known in the art. See the state signals and state registers shown in Figures 3-6 and 9 of Allison. It would have been obvious to a person of ordinary skill in the art to provide required or sufficient interlock signals such that data can be transmitted to and from a network.

In the communication filed on 2/23/2004, Applicants appear to contend that the term thread as used by Applicants in their specification has different meaning than commonly accepted in the art. It should be noted that the terms in the claims should be given their broadest interpretation and limitations in the specification should not be read into the claims. Further, the claims clearly specify that the threads are processing program threads and which is in line with the commonly accepted meaning. See also the term "thread" in Microsoft Computer Dictionary, 4th edition on page 442. Furthermore, Applicants fail to explain how the steps would have different effect if the term thread in the steps is interpreted differently.



DAVID Y. ENG
PRIMARY EXAMINER